Dkt: 303.881US1

IN THE SPECIFICATION

Please amend the specification as follows:

Please delete the two paragraphs beginning at page 3, line 1 and insert the following two amended paragraphs as follows:

Summary

The present invention provides in one embodiment a printed circuit board having a dielectric constant different from the dielectric constant of free space, with at least two microstrip lines routed adjacent to one another on a surface of the printed circuit board. A dielectric coating is applied to at least one of the at least two microstrip lines such that the dielectric constant of the dielectric coating differs from the dielectric constant of free space. In one further embodiment, the dielectric coating comprises a material having a dielectric constant approximately equal to the dielectric constant of the printed circuit board.

Brief Description of the Figures

Figure 1 illustrates a cutaway view of a pair of stripline conductors within a printed circuit board, consistent with the prior art.

Figure 2 shows a cutaway view of a pair of microstrip line conductors on a printed circuit board, consistent with the prior art.

Figure 3 shows a pair of adjacent microstrip lines mounted on a printed circuit board connecting a signal generating integrated circuit to a signal receiving integrated circuit, consistent with an embodiment of the present invention.

Figure 4 shows a an eye pattern illustrating jitter in a stripline, consistent with the prior art.

Figure 5 shows an eye pattern illustrating jitter in a microstrip line, consistent with the prior art.

Figure 6 illustrates a pair of adjacent microstrip lines with a dielectric coating, consistent with the present invention.

Figure 7 illustrates the difference in even-mode and odd-mode velocities with various dielectric overcoat thicknesses, consistent with an embodiment of the present invention

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The paragraph beginning at page 7, line 21 as follows:

The present invention seeks in one embodiment to reduce the far-end observed effects such as crosstalk and jitter by adding a dielectric coating to the top side of such microstrip lines, as is shown in Figure 6. Here, a 5 mil FR4 fiberglass material 601 having a dielectric constant of approximately 4.2 separates a ground plane 602 from adjacent microstrip lines 603 and 604. A dielectric coating 605 is applied in a thickness of 8.2 mils, which is calculated to produce a stable effective dielectric constant observed by the microstrip lines, and make the propagation velocities of signals in the microstrip lines substantially the same under varying signal conditions.

The paragraph beginning at page 8, line 20 as follows:

Figure 7 illustrates the difference in even-mode velocities (Veven) and odd-mode velocities (V_{odd}) with various dielectric overcoat thicknesses, consistent with an embodiment of the present invention. The resulting even and odd mode propagation velocities shown here will change with geometry and materials used in constructing the microstrip lines, but serves to illustrate the effectiveness of an 8.2 mil dielectric overcoat over microstrip lines on a 5 mil FR4 board, where the dielectric constant of the overcoat and the FR4 board are both approximately 4.2, such as was shown and discussed in conjunction with Figure 6.